



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,478	03/16/2004	Hiroki Akano	FUJI 21.071	1789
26304	7590	02/01/2006	EXAMINER	
KATTEN MUCHIN ROSENMAN LLP			MULL, FRED H	
575 MADISON AVENUE			ART UNIT	
NEW YORK, NY 10022-2585			PAPER NUMBER	
			3662	

DATE MAILED: 02/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/801,478

Applicant(s)

AKANO, HIROKI

Examiner

Fred H. Mull

Art Unit

3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 and 19-22 is/are allowed.
- 6) ☒ Claim(s) 6-8, 12-14, and 18 is/are rejected.
- 7) ☒ Claim(s) 9-11 and 15-17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/16/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102 and 103***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 6-8 and 12-14 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Soliman and Loomis.

In regard to claims 6 and 12, Soliman discloses:

a memory for storing position information relating to an obstacle/building (col. 10, lines 23-44); and

the use of his invention in an inverted/inverse DGPS mode (col. 4, lines 47-48).

Soliman fails to include the detail of inverted/inverse DGPS and its use in his inventions.

Loomis discloses an inverted/inverse DGPS system. Since these are the details of an inverted/inverse DGPS system, they are inherent in the inverted/inverse DGPS

Art Unit: 3662

system of Soliman. Alternatively, it would have been obvious to use a known inverted/inverse DGPS system as the inverted/inverse DGPS system in Soliman.

The inverted/inverse DGPS system of Loomis includes:

a receiver for receiving position information of the mobile station that has been measured by the mobile station based on signals from a plurality of GPS satellites, and for receiving mobile station satellite information indicating at least one of the satellites from which the mobile station has received a signal (col. 5, line 58 to col. 6, line 22, where both the uncorrected position and the index numbers for the M satellites are sent by the mobile);

a collator for collating reference station satellite information indicating at least one of the satellites from which the reference station has received a signal, with the mobile station satellite information (col. 5, line 58 to col. 6, line 22, where the reference station collates to identify and use the same M satellites that the mobile does); and

a correction unit for correcting the measured position of the mobile station based on a result of the collation and coordinates of the obstacle (col. 5, line 58 to col. 6, line 22, where the correction is based on the M satellites identified as those used by the mobile, where, further, the satellites chosen by the mobile were chosen to not be obstructed by the obstacle, as taught by Soliman).

It is inherent/would have been obvious to use the invention of Soliman with an inverted/inverse DGPS system as explicitly taught by Soliman (col. 4, lines 47-48).

In regard to claims 7 and 13, a display for displaying positions of the mobile station and the obstacle/building on a screen is well known.

In regard to claims 8 and 14, it is well known to identify the satellites with the highest signal strength for positioning.

2. Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Jandrell.

Jandrell discloses if the apparatus cannot receive a signal from one of the satellites or quality of a received signal is lower than a predetermined value, the apparatus determines that the apparatus is not positioned in an area where there is no obstacle between the satellite and the apparatus, or determines that reliability for the measured position of the apparatus is lower than that in a case where the apparatus is positioned in said area (col. 1, lines 32-41, where, if received signal quality is lower than a predetermined value, the reliability for the measured position of the apparatus is lower than that in a case where the apparatus is positioned in a non-obstructed area).

3. Claim 18 is rejected under 35 U.S.C. 102(a) as being anticipated by Bozzone.

Bozzone discloses if the apparatus cannot receive a signal from one of the satellites or quality of a received signal is lower than a predetermined value, the apparatus determines that the apparatus is not positioned in an area where there is no obstacle between the satellite and the apparatus, or determines that reliability for the measured position of the apparatus is lower than that in a case where the apparatus is positioned in said area (¶43, where, if received signal quality is lower than a predetermined value, the reliability for the measured position of the apparatus is lower than that in a case where the apparatus is positioned in a non-obstructed area).

Art Unit: 3662

4. The examiner also finds the following reference(s) relevant:

Kageyama (col. 8, lines 32-46) and Fugiwara (Fig. 4), which teaches a display for displaying positions of the mobile station and the obstacle/building on a screen.

Yoshihara (col. 3, lines 2-7), which teaches identify the satellites with the highest signal strength for positioning.

Lui (col. 1, lines 17-27; col. 3, line 49 to col. 4, line 48), which teaches the limitations of claims 6 and 12 expect for "and coordinates of the obstacle".

Applicant is encouraged to consider these documents in formulating their response (if one is required) to this action, in order to expedite prosecution of this application.

5. The examiner also finds the following reference(s) relevant, but not prior art:

Sakagami, published July 21, 2005.

***Allowable Subject Matter***

6. Claim(s) 1-5 and 19-22 are allowed.
7. Claim(s) 9-11 and 15-17 is/are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
8. The following is an examiner's statement of reasons for allowance:  
  
The closest prior art, Umemura, Hijiri, and Green, do(es) not teach or make obvious the following limitation(s):  
  
For claims 1-5, 9-11, and 15-17: a correction unit for correcting the measured position of the mobile station to another position having a different height, according to the measured quality of the signal from the at least one of the satellites.  
  
For claims 19-22: Switching determination of whether there is an obstacle between the measured position of the apparatus and a satellite based on the signal quality received from the satellite.  
  
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

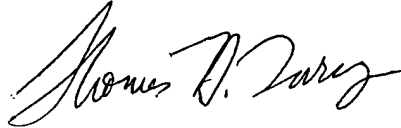
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred H. Mull whose telephone number is 571-272-6975. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fred H Mull  
Examiner  
Art Unit 3662

fhm



THOMAS H. TARCZA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600